United States

Department of Transportation

DOT Enterprise Architecture and Business Transformation Office

Enterprise Architecture Performance Measurement Guide

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Revision History:

Revision	Revision Description	Author	Date
Version 1.0	Draft version	DOT EAPMO Performance Analyst	7/2006
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Version 1.4	Draft version	DOT EAPMO	1/2007
Version 1.5	Draft version update to reflect guidance for DOT performance milestones	DOT EAPMO	9/2007
Version 2.0	Draft version reformatted and revised to accurately reflect the performance objectives and activities of the DOT Enterprise Architecture and Business Transformation Office	DOT Enterprise Architecture and Business Transformation Office (EABTO)	12/2008

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Introduction

The Department of Transportation (DOT) Office of the Chief Information Officer (OCIO) is responsible for guiding the direction of the Department both internally and externally. In this role, the OCIO provides guidance and support for the Department as well as the Operating Administrations (OAs). Specifically, the DOT Enterprise Architecture and Business Transformation Office (EABTO) is responsible for ensuring alignment and consistency of EA across the OAs by providing guidance and oversight to the EA Programs, tracking and monitoring performance, and supporting enterprise planning and decision-making. In accomplishing this goal, the EABTO has developed a set of EA performance measures.

Purpose

The DOT EA program is focused on delivering business transformation related services that result in value creation and increased efficiencies for DOT's mission and business areas. The EA performance measures and indicators have been created for DOT to increase the business performance of the Department and the OAs by monitoring, tracking, and eliminating redundant manpower and IT efforts. The measurement of performance will also guide the Department in accomplishing its "To-Be" target architecture through the close examination of the current business processes, information technology systems, and the investment dollars associated with each. The EA performance objectives, measures, and indicators are closely aligned to the strategic goals detailed within the OCIO Information Resource Management Strategic Plan, the Federal Enterprise Architecture (FEA) Strategies, and the Department's Strategic Plan.

The documented performance measures and indicators in this guide will help the Department to reduce or eliminate redundancies; track dollars associated with supporting systems and their maintenance; and align the applications and information technology (IT) investments and systems utilized throughout the Department to an IT portfolio by:

- Identifying, assessing, and implementing new cross-agency opportunities through the documentation of current processes, systems, and applications
- Increasing EA Assessment scores through documenting current processes, applications, systems, and investments by aligning all processes and systems to an essential function and identifying opportunities for re-use and collaboration

Stakeholders

The EABTO will help provide conformity across the Department as well as identify the ways in which the success and value of the EA program can be measured. The DOT EA performance measures will be dispersed throughout the Department with the expectation that each OA will review and align their performance measures through a similar methodology to provide more consistent performance reporting for the EA programs across the Department.

The EA performance measures and indicators are aligned to each of the Office of Management and Budget (OMB) EA Assessment Framework (v3.0) capability areas. The performance indicators demonstrate at least one capability and will allow the EABTO to capture and report the Completion, Use and Results of each DOT EA performance measure. The information captured will enable DOT executives and managers to easily understand and share with inquiring individuals and organizations, as required.

The stakeholders presented in Table 1 are expected to leverage the EA performance measures for improved reporting and performance of the Department's EA program.

Table 1. DOT EA Program Stakeholders

DOT EA Program Stakeholders
DOT Executives and Leadership
Chief Information Officers
EA Subcommittee (EAS) Members
Budget and capital planning officials
Program managers
IT infrastructure managers
Project managers
Solution developers
EABTO
Office of Management and Budget (OMB)

EA Performance Objectives and Measures

The EA performance objectives and measures have been developed and designed to guide the overall direction and ongoing activities of the DOT EABTO across its six program areas:

1. Program Management
2. Governance and Guidance
3. EA Repository – Transportation EA Management System (TEAMS)
4. Communication, Outreach, and Training
5. Facilitation of Transformation
6. Enterprise Integration

The EA performance objectives and measures provide a mechanism for measuring the EA program's forward progress and success. Each objective has been aligned to a DOT strategic goal and outcome as detailed in Figure 1.

Figure 1. Strategic Alignment

DOT Strategic Goal

DOT Strategic Outcome

EA Performance Objective

EA Performance Measure
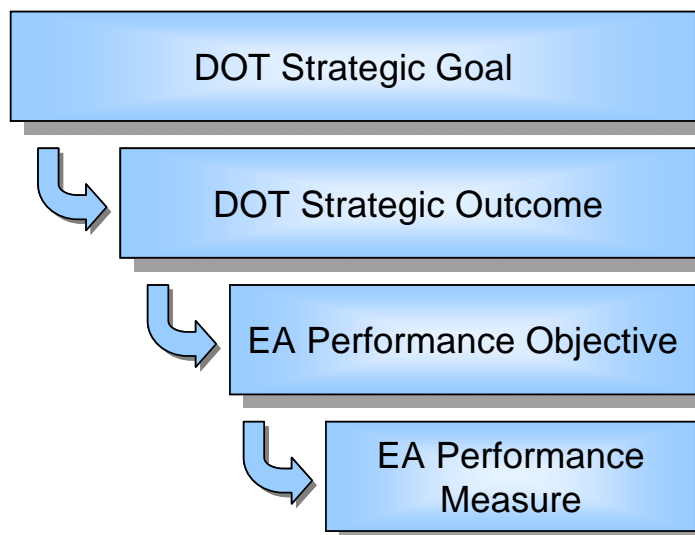
EA performance objectives have been mapped to the DOT Strategic Plan/Organizational Excellence Goal, which is:

> "To advance the Department's ability to lead and manage for results through effective leadership, a high-performing workforce, responsible stewardship, and innovative solutions."

Table 2 shows the EA performance objectives and measures, which reflect desired outcomes (EA performance objectives) and value indicators (EA performance measures) across the EABTO's six program areas. It also aligns each objective to specific outcomes and strategies of the DOT Strategic Plan/Organizational Excellence Goal.

Table 2. EA Performance Objectives and Measures

No.	EA Performance Objectives	EA Performance Measures	DOT Strategic Plan Alignment	
			Organizational Excellence Outcomes	Organizational Excellence Strategies
1. Program Management				
1	Survey DOT EA community stakeholders and practitioners to evaluate effectiveness of EABTO support and identify opportunities for improvement	• % response rate on EA performance survey	• Leaders advance strategic goals and ensure accountability for performance results.	• Use a comprehensive performance management system and program evaluations to ensure continuous improvement, accountability, and proper oversight.
2	Achieve a green OMB score	• Overall green score on EAAF v3.0	• Leaders advance strategic goals and ensure accountability for performance results. • All resources are used efficiently and effectively to meet mission goals and fiduciary responsibilities.	• Mature, institutionalize, streamline, and execute business practices and processes throughout the Department to advance information sharing and utilization of information resources.
2. Governance and Guidance				
3	Establish segment participation to ensure usefulness of EA methods and guidance	• % participation of high priority segments • % participation of other segments	• The right people with the rights skills in the right place at the right time. • All resources are used efficiently and effectively to meet mission goals and fiduciary responsibilities. • Effective strategic partnerships and stakeholder capabilities are leveraged and enhanced to help achieve strategic objectives.	• Mature, institutionalize, streamline, and execute business practices and processes throughout the Department to advance information sharing and utilization of information resources.

No.	EA Performance Objectives	EA Performance Measures	DOT Strategic Plan Alignment	
			Organizational Excellence Outcomes	Organizational Excellence Strategies
4	Develop and implement Department policy on EA reporting across segments and OAs	• % OA and segment participation	• Leaders advance strategic goals and ensure accountability for performance results.	• Mature, institutionalize, streamline, and execute business practices and processes throughout the Department to advance information sharing and utilization of information resources.
3. EA Repository (TEAMS)				
5	Develop processes/procedures and training for TEAMS operations and usage	• % of TEAMS users trained on the TEAMS tool	• Business processes and data-driven decision-making are optimized through innovative solutions that foster transparency, increase mission effectiveness, enhance information and systems, reduce redundancies, and minimize costs.	• Mature, institutionalize, streamline, and execute business practices and processes throughout the Department to advance information sharing and utilization of information resources. • Maximize stakeholder outreach based on greater transparency by leveraging new technology solutions to improve operational efficiency.
6	Define information reporting requirements for stakeholders and populate information in the TEAMS repository	• % of priority segment data populated within TEAMS	• All resources are used efficiently and effectively to meet mission goals and fiduciary responsibilities. • Effective strategic partnerships and stakeholder capabilities are leveraged and enhanced to help achieve strategic objectives.	• Maximize stakeholder outreach based on greater transparency by leveraging new technology solutions to improve operational efficiency.
4. Communication, Outreach, and Training				

No.	EA Performance Objectives	EA Performance Measures	DOT Strategic Plan Alignment	
			Organizational Excellence Outcomes	Organizational Excellence Strategies
7	Develop communication and outreach materials on website targeted to DOT executives, Segment Owners, and EA practitioners	• % of surveyed respondents indicating that the EABTO website is a useful communication and collaboration tool	• Leaders advance strategic goals and ensure accountability for performance results. • All resources are used efficiently and effectively to meet mission goals and fiduciary responsibilities.	• Maximize stakeholder outreach based on greater transparency by leveraging new technology solutions to improve operational efficiency.
8	Communicate EA methodology via outreach and training	• % of DOT architects and segment stakeholders trained on the Federal Segment Architecture Methodology (FSAM)	• All resources are used efficiently and effectively to meet mission goals and fiduciary responsibilities.	• Maximize stakeholder outreach based on greater transparency by leveraging new technology solutions to improve operational efficiency.
	5. Facilitation of Transformation			
9	Complete segment level architecture planning for high priority segments	• % completion of segment level architecture planning for high priority segments by FY2010	• All resources are used efficiently and effectively to meet mission goals and fiduciary responsibilities.	• Conduct thorough business case analyses to maximize efficiencies and to support data-driven decision-making.
10	Establish EABTO as a facilitator of transformation capable of providing methodology and encouraging participation among stakeholder groups	• % of OAs and segments actively engaged with EABTO on EA/BT efforts	• All resources are used efficiently and effectively to meet mission goals and fiduciary responsibilities. • Effective strategic partnerships and stakeholder capabilities are leveraged and enhanced to help achieve strategic objectives.	• Mature, institutionalize, streamline, and execute business practices and processes throughout the Department to advance information sharing and utilization of information resources.
	6. Enterprise Integration			

No.	EA Performance Objectives	EA Performance Measures	DOT Strategic Plan Alignment	
			Organizational Excellence Outcomes	Organizational Excellence Strategies
11	Demonstrate EA/BT impact via Health of Investment (HOI) scores	• % of investments with green score in EA/BT areas by FY2010	• All resources are used efficiently and effectively to meet mission goals and fiduciary responsibilities. • Business processes and data-driven decision-making are optimized through innovative solutions that foster transparency, increase mission effectiveness, enhance information and systems, reduce redundancies, and minimize costs.	• Use a comprehensive performance management system and program evaluations to ensure continuous improvement, accountability, and proper oversight.

Performance Monitoring

The EABTO's ongoing project plans and activities support the overall performance objectives. The EABTO measures the progress and success of each major project or initiative in congruence with those performance objectives identified in this document.

The EABTO will conduct quarterly status reviews to evaluate each of its performance objectives and measures and ensure whether program activities are on course for meeting them or a change in direction is required. A more detailed assessment will be completed annually to be able to assess its performance against a previous year's data, which will allow the EABTO to measure its progress over extended periods of time. Objective measures have been designed so they can be tracked via statistics and documentation such as budget exhibits, PART scores, the TEAMS repository, and external reviewers of performance. Subjective value measures have been crafted to gauge the perceptions of the stakeholders towards the DOT EA program. Subjective measures will be updated on an annual basis by using surveys, interviews, and workshops. The EABTO will use the following template, detailed in Table 3, to depict a summary of results.

EA performance objectives and measures will assist the EABTO in determining the effectiveness and efficiency of its activities and services and where improvements need to be made in order to achieve its mission and vision.

Table 3. EA Performance Measures, Data Sources, and Summary of Measurement Results

No.	EA Performance Objectives	EA Performance Measures	Stakeholders	Measure Type	Baseline	Target	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	Information Source
1. Program Management											
1	Survey DOT EA community stakeholders and practitioners to evaluate effectiveness of EABTO support and identify opportunities for improvement	• % response rate on EA performance survey	• DOT Executives and Leadership • Chief Information Officers • EAS Members	Objective	TBD	65%						• EA survey
2	Achieve a green OMB score	• Overall green score on EAAF v3.0	• DOT Executives and Leadership • Chief Information Officers • Budget and capital planning officials • Segment Owners • OMB	Objective	Green	Green						• EAAF v3.0 submission
2. Governance and Guidance											
3	Establish segment participation to ensure usefulness of EA methods and guidance	• % participation of high priority segments • % participation of other segments	• Segment Owners	Objective	TBD	100% high priority 40% other						• Working group minutes, attendance lists

No.	EA Performance Objectives	EA Performance Measures	Stakeholders	Measure Type	Baseline	Target	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	Information Source
4	Develop and implement Department policy on EA reporting across segments and OAs	• % OA and segment participation	• DOT Executives and Leadership • Chief Information Officers • Segment Owners	Objective		100%						• Inputs on quarterly reporting templates (e.g., EASR)
				3. EA Repository (TEAMS)								
5	Develop processes/ procedures and training for TEAMS operations and usage	• % of TEAMS users trained on the TEAMS tool	• TEAMS users	Objective	0%	100%						• TEAMS training rosters
6	Define information reporting requirements for stakeholders and populate information in the TEAMS repository	• % of priority segment data populated within TEAMS	• DOT Executives and Leadership • Chief Information Officers • Segment Owners	Objective	0%	100%						• Completed data templates
				4. Communication, Outreach, and Training								

No.	EA Performance Objectives	EA Performance Measures	Stakeholders	Measure Type	Baseline	Target	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	Information Source
7	Develop communication and outreach materials on website targeted to DOT executives, Segment Owners, and EA practitioners	• % of surveyed respondents indicating that the EABTO website is a useful communication and collaboration tool	• DOT Executives and Leadership • Chief Information Officers • EA practitioners	Subjective	TBD	65%						• Website survey
8	Communicate EA methodology via outreach and training	• % of DOT architects and segment stakeholders trained on the Federal Segment Architecture Methodology (FSAM)	• DOT Executives and Leadership • Chief Information Officers • DOT architects • Segment Owners	Objective	0%	100%						• FSAM training rosters
	5. Facilitation of Transformation											
9	Complete segment level architecture planning for high priority segments	• % completion of segment level architecture planning for high priority segments	• DOT Executives and Leadership • Chief Information Officers • Segment Owners	Objective		80% by FY 2010						• Segment architecture artifacts • Blueprints

No.	EA Performance Objectives	EA Performance Measures	Stakeholders	Measure Type	Baseline	Target	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Actual	Information Source
10	Establish EABTO as a facilitator of transformation capable of providing methodology and encouraging participation among stakeholder groups	• % of OAs and segments actively engaged with EABTO on EA/BT efforts	• DOT Executives and Leadership • Chief Information Officers • Segment Owners	Objective		100%						• Meeting minutes
			6. Enterprise Integration									
11	Demonstrate EA/BT impact via Health of Investment (HOI) scores	• % of investments with green score in EA/BT areas	• DOT Executives and Leadership • Chief Information Officers • Budget and capital planning officials • Program managers • IT infrastructure managers • Project managers	Objective		80% by FY 2010						• HOI scores

Conclusion

The goal of the EABTO at the DOT is to serve as the authoritative decision-making tool to improve mission performance and optimize the use of DOT assets. Alignment between the DOT Strategic Plan, the DOT IRM Strategic Plan, and the OA strategic goals with DOT EA performance data will increase business performance through the entire Department with the ability to monitor, track, and eliminate redundant manpower and IT efforts.

Through measuring the performance of the current business processes, information technology systems, and the dollars associated with each, the DOT will be able to use the captured measurement data to guide a wide variety of business and IT stakeholders toward improved DOT investment decision-making, resulting in elevated mission and business performance.